

## **Collect & Re-use Rainwater**

During a moderate rainfall, hundreds of gallons of water run off a typical residential roof and into the gutters, often discharging to the driveway and then into the street. Other hard surfaces such as sidewalks and patios also prevent water from soaking into the ground. As the water flows along the ground, this storm water picks up contaminants such as fertilizers, pesticides, automotive fluids, dirt and debris. Storm water is not treated and it can carry these pollutants straight into the nearest waterway. There are simple practices that can help capture and filter rain water back into the ground, stopping the water's rush into the storm sewers.

Channel water flow to areas where water will remain long enough to filter into the soil. Move downspouts to they run away from paved areas to relatively flat, grassy or well-vegetated areas.



Another way to reduce runoff is to use rain water for washing cars or watering lawns and gardens. Simple rain barrels allow you to re-use rainwater for non-potable uses.

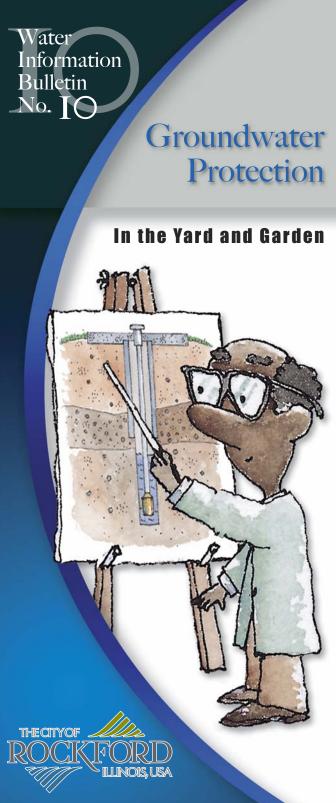


# **Questions?**

If you have any questions, please feel free to contact the City of Rockford Water Division – Water Quality Section III Cedar St Rockford, IL 61102 (779) 348-7151

For more information, visit our website at **WWW.rockfordil.gov** 



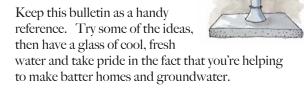


# **Groundwater Protection**

In the Yard and Garden

#### What Can I Do?

Groundwater protection is not just a concern for farmers, water system operators, or private well owners. We all have a stake in protecting the amount and quality of our water. Many people are already trying to be "groundwater smart".



## **Fertilizers**

Fertilizer usually contains nitrogen, Phosphorus (as  $P_2O_5$ ) and potassium (as  $K_2O$ ). The numbers on a fertilizer bag indicate the percentages of these three plant nutrients. For example, a fertilizer labeled 10-1-4 contains 10% nitrogen, 1%  $P_2O_5$  and 4%  $K_2O$ . Nitrogen is the most important lawn nutrient but it can contaminate groundwater with nitrate. Phosphorus can contaminate rivers, lakes and ponds causing excessive weed and algae growth. In many cases phosphorus levels in soils are more that sufficient to maintain a healthy lawn and additional phosphorus is not needed.

If you think your yard is in need of fertilizer, choose a fertilizer high in Water Insoluble Nitrogen (WIN). WIN is released slowly and helps prevent "lawn burn" and groundwater contamination. WIN fertilizers cost more but they're worth it.

If your soil needs potassium, apply it with your fall fertilization. Fall fertilizing promotes deep and healthy roots. Use a fertilizer with high potassium content.

Unless your soil is deficient in phosphorus, ask for a fertilizer with zero for the middle number.



#### **Weed Control**

Control weeds by following good mowing, watering and fertilizing practices. If you must use chemicals, spray individual weeds rather than applying a fertilizer/herbicide blend to the entire lawn.

**Dandelions:** Dig them out. Digging 4 – 5 inches of the root will kill most dandelions. You may have to dig a second or third time.

**Crabgrass:** Keep your lawn tall – at least 3 inches – to shade out crabgrass. Apply crabgrass killer only is you have noticeable crabgrass problems. Also, don't apply fertilizer in July and August – this tends to grow crabgrass better than it does lawn.

**Natural Weed Killer:** Try this safe, easy and effective way to get rid of your weeds.

I tablespoon of apple cider vinegar I tablespoon baby shampoo I tablespoon gin I quart of warm water

Combine all of these ingredients into a bucket and then pour into a hand held sprayer. Drench the weeds to the point that the solution will run off of them.

#### **Gardens**

Don't spray just because you see insects eating your plants. Insecticides kill good bugs as well as pests. Identify the problem insect. Wait and see if it gets worse – good insects like ladybugs might keep the problem under control. First, pick them off by hand; if you must spray, use a product that is approved for your crop and will kill the insect in question. Consider using insecticidal soaps and microbial sprays. If you decide to spray, read and follow all label directions exactly.



## **Lawn Alternatives & Natural Plantings**

Many homeowners find that a beautiful yard is not necessarily a carpet of grass. Try replacing parts of your lawn with low maintenance ground covers, shrubs and perennial flowers that require little or no fertilizer. Most native plants do not need fertilizer.

